

Sheet 1 of 1		INFORMATION DISCLOSURE STATEMENT					
FORM PTO 1449 (modified)  U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  LIST OF REFERENCES CITED BY APPLICANT(S) <i>(Use several sheets if necessary)</i>  Date Submitted to PTO: December 19, 2005				ATTY DOCKET NO. 2003_1117  APPLICANT Mitsuaki OSHIMA et al.  FILING DATE August 7, 2003		SERIAL NO. 10/635,468  GROUP 2631	
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/DH/	AA	4,597,090	6-24-86	Forney, Jr.			
/DH/	AB	4,077,021	2-28-78	Csajka et al.			
/DH/	AC	2005/0084750	4-21-05	Wang et al.			
/DH/	AD	2005/0050633	3-17-05	Epstein et al.			
/DH/	AE	2005/0922922					
/DH/	AF	4,918,437	4-17-90	Jasinski et al.			
/DH/	AG	5,023,889	6-11-91	Divsalar et al.			
/DH/	AH	5,063,452	11-5-91	Higurashi			
/DH/	AI	5,124,852	6-23-92	Suwa et al.			
/DH/	AJ	5,136,380	8-4-92	Cho			
/DH/	AK	5,146,335	9-8-92	Kim et al.			
/DH/	AL	5,148,422	9-15-92	Sako et al.			
/DH/	AM	5,218,436	6-8-93	Sugiyama et al.			
FOREIGN PATENT DOCUMENTS							
/DH/		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES      NO
/DH/	AN	2627574	7-21-04	CN			
/DH/	AO	1529838	5-11-05	EP			abstract
/DH/	AP	1499725	5-26-04	CN			only abstract
/DH/	AQ	2004-159207	6-3-04	JP			corresponds to AP
/DH/	AR	1528854	5-11-05	EP			only abstract
/DH/	AS	52118	12-16-02	UA			only abstract
/DH/	AT	1569334	1-26-05	CN			
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
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EXAMINER				/Dac Ha/		DATE CONSIDERED 03/08/2007	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include cop. this form with next communication to applicant.

Sheet 1 of 1								INFORMATION DISCLOSURE STATEMENT			
FORM PTO 1449 (modified)  U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)  Date Submitted to PTO: June 22, 2006					ATTY DOCKET NO. 2003_1117		SERIAL NO. 10/635,468				
					APPLICANT Mitsuaki OSHIMA et al.		FILING DATE August 7, 2003		GROUP 2634		
U.S. PATENT DOCUMENTS											
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME		SUBCLASS	FILING DATE IF APPROPRIATE				
DH	AA	4,267,592	5-12-81	Craiglow	—	—	—				
	AB	4,601,045	7-15-86	Lubarsky	—	—	—				
	AC	4,912,706	3-27-90	Eisenberg et al.	—	—	—				
	AD	4,914,655	4-3-90	Johannes et al.	—	—	—				
	AE	5,018,198	5-21-91	Takahashi	—	—	—				
	AF	4,003,002	1-11-77	Snijders et al.	—	—	—				
DH	AG	4,053,713	10-11-77	Nitadori	—	—	—				
	AH										
	AI										
FOREIGN PATENT DOCUMENTS											
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO				
	AJ										
	AK										
	AL										
	AM										
	AN										
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	AO										
	AP										
	AQ										
EXAMINER					DATE CONSIDERED						

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## INFORMATION DISCLOSURE STATEMENT

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PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
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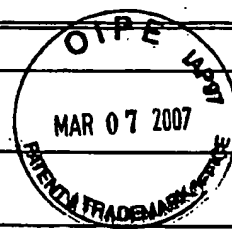
Date Submitted to PTO: March 7, 2007

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10/635,468APPLICANT  
Mitsuaki OSHIMA et al.FILING DATE  
August 7, 2003

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*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/DH/	AA	5,210,770	5-11-93	Rice			
/DH/	AB	5,519,730	5-21-96	Jasper et al.			
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
/DH/	AJ	3-13145	1-22-91	Japan			abstract
/DH/	AK	4-322592	11-12-92	Japan			abstract
/DH/	AL	63-253738	10-20-88	Japan			abstract
/DH/	AM	62-502932	11-19-87	Japan			abstract
/DH/	AN	58-107740	6-27-83	Japan			abstract

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AO	
	AP	
	AQ	

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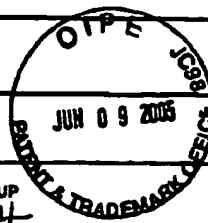
DATE CONSIDERED

03/19/2007

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U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
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2631

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	5,083,445	11-5-91	Nishizawa et al.	_____	_____	_____
	AB	5,819,000	10-6-98	Oshima	_____	_____	_____
	AC	5,999,569	12-7-99	Oshima	_____	_____	_____
DH	AD	5,892,879	4-6-99	Oshima	_____	_____	_____

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AE	7-99522	4-11-95	Japan	_____	_____	abstract
	AF	7-79415	3-20-95	Japan	_____	_____	abstract
	AG	5-75568	3-26-93	Japan	_____	_____	abstract
	AH	86/07223	12-4-86	WO	_____	_____	X
	AI	2 187 611	9-9-87	Great Britain	_____	_____	X
	AJ	85/04541	10-10-85	WO	_____	_____	X
	AK	4-196822	7-16-92	Japan	_____	_____	abstract
	AL	2-166979	6-27-90	Japan	_____	_____	abstract
	AM	64-74836	3-20-89	Japan	_____	_____	abstract
DH	AN	63-108215	9-20-78	Japan	_____	_____	abstract

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

DH	AO	Martin Vetterli et al., Multiresolution Coding Techniques for Digital Television: A Review, Multidimensional Systems and Signal Processing, Volume 3, May 1992, Pages 161-187.
DH	AP	Ezio Biglieri et al., Introduction to Trellis-Coded Modulation with Applications, April 6, 1992, Pages 173-207.
DH	AQ	English Language Abstract of European Patent No. 93 30 7575 <i>in like</i>

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DATE CONSIDERED

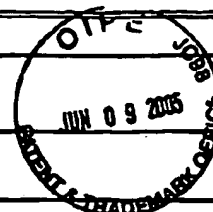
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10/635,468APPLICANT  
Mitsuaki OSHIMA et al.FILING DATE  
August 7, 2003GROUP  
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*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DA	AA	4,227,152	10-7-80	Godard et al.	—	—	—
	AB	4,525,848	6-25-85	Bremer et al.	—	—	—
	AC	4,751,478	6-14-88	Yoshida	—	—	—
	AD	4,891,806	1-2-90	Farias et al.	—	—	—
	AE	4,903,125	2-20-90	Parker	—	—	—
	AF	4,937,844	6-26-90	Kao	—	—	—
	AG	5,164,963	11-17-92	Lawrence et al.	—	—	—
	AH	5,555,275	9-1996	Oshima	—	—	—
DA	AI	5,565,926	10-15-96	Bryan et al.	—	—	—

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DA	AJ	311188	4-12-89	EP	—	—	X
	AK	329158	8-23-89	EP	—	—	X
	AL	64-5135	1-10-89	JP	—	—	X
	AM	63-28145	2-5-88	JP	—	—	X
DA	AN	62-133842	6-17-87	JP	—	—	X

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

DA	AO	Tricia Hill et al., "A Performance Study of NLA 64-State QAM", IEEE Transactions on Communications, vol. COM-31, June 1983, no. 6, pages 821-828.
DA	AP	Hideki Ishio et al., "A Proposal of a Carrier Digital Transmission System Using Multi-Level APSK", pages 1-20. ~ 94p
DA	AQ	Shanmugam, "Digital and Analog Communication Systems" 1979, p. 272.

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